

Page



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/879,220	06/13/2001	David Holtzman	OPI-101-CIP-II	6182
28970	7590	12/02/2004	EXAMINER	
SHAW PITTMAN IP GROUP 1650 TYSONS BOULEVARD SUITE 1300 MCLEAN, VA 22102			AVELLINO, JOSEPH E	
			ART UNIT	PAPER NUMBER
			2143	
DATE MAILED: 12/02/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/879,220

Applicant(s)

HOLTZMAN ET AL.

Examiner

Joseph E. Avellino

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-90 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 9, 13-55, 60, 64-69 and 71-90 is/are rejected.
- 7) ☒ Claim(s) 5-8, 10-12, 56-59, 61-63 and 70 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-90 are pending in this examination; claims 1, 26, 33, 52, 64, and 72 independent.

Allowable Subject Matter

2. Claims 5-8, 10-12, 56-59, and 61-63; are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and fixing any rejections based on indefiniteness.

3. Exemplary claim 5. Claim 5 discloses that the influence score is computed based on the equation: $F = a * \sum_{i=1}^m Rel_i * d_i + b * \sum_{i=1}^m I_i * d_i$ wherein a and b are selectable weighting constants Rel is the relevance of a message, I is the impact of a message, d is a decay function that reduces the impact of older message, and wherein m is the number of messages used to compute

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:
- The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. Claim 56-59 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 2143

6. Claim 56 recites the limitation "the influence score F" which lacks antecedent basis. Correction is required. Claims 57-59 depend upon claim 56 and are rejected for the same reasons as stated above.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, 9, 13-15, 26-31, 33, 35-38, 52-55, 60, 64-69, and 71-75 are rejected under 35 U.S.C. 102(e) as being anticipated by Knight et al. (USPN 6,571,234) (hereinafter Knight).

8. Referring to claim 1. Knight discloses a system for processing message traffic from a plurality of electronic discussion forums (e.g. abstract; col. 27, lines 20-29), comprising:

a message collector for collecting messages from the plurality of electronic discussion forums (col. 27, lines 20-29); and

means for processing the messages based on a series of topics in order to track a plurality of pseudonyms (i.e. authors), wherein the processing includes computing a relevance score (the Office takes the term "relevance score" to be broadly construed as "a method to disseminate messages from other messages based on a criterion") for a collected message based on at least one topic (i.e. area/class/subclass classification system for messages) (e.g. abstract; col. 22, lines 22-67).

9. Referring to claim 2, Knight discloses the means for processing is further adapted to compute a buzz score based on a set of messages for the at least one topic (e.g. abstract; col. 16, lines 45-55).

10. Referring to claims 3 and 4, Knight discloses the buzz score is computed according to the formula $B = \sum_{i=1}^n (Rel_i \cdot F_i)$ where Rel is a computed relevance score for a message (i.e. topic classification) F is a computed influence score for a poster of a message (i.e. author) and n is the number of messages in the set (this formula is interpreted in the binary sense, such that the Buzz score is all the messages that satisfy the formula "if message i contains the selected author AND the selected topic then add it to the list". All the corresponding messages which satisfy this criteria are added to the list and shown to the user) (col. 16, lines 48-55).

11. Referring to claim 9, Knight discloses the means for processing is adapted to compute a relative buzz score that measures relative changes in the posting activity

level (i.e. if the author adds more messages pertaining to this topic, they will satisfy the criteria and then be added to the list) (col. 16, lines 48-55).

12. Referring to claim 13, Knight discloses the means for processing is further adapted to compute an opinion rating for a collected message (i.e. identify a classification) (e.g. abstract).

13. Referring to claim 14, Knight discloses the opinion rating is computing using a textual analysis software application (i.e. content sort routine) (col. 22, lines 7-43).

14. Referring to claim 15, Knight discloses the textual analysis software application compares a content of the collected message with a plurality of known words and phrases indicative of expressions of an opinion (i.e. opinion is taken to mean an opinion of a subject which then can be classified (col. 22, lines 7-43).

15. Claims 26-31, 33, 35-38, 52-55, 60, 64-69, and 71-75, are rejected for similar reasons as stated above. Furthermore Knight discloses computing a migration score providing a measurement of the movement of posting activity levels between topics or groups of topics from the series of topics (col. 20, lines 35-53).

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Knight.

18. Referring to claim 34, Knight discloses the invention substantively as described in claim 33. Knight furthermore discloses linking forums to associated topics (col. 9, lines 29-35). Knight does not specifically state using tables in the database to link forums to associated topics, however it is well known that tables are commonly used in databases and would be obvious to one of ordinary skill in the art to modify the system

Art Unit: 2143

of Knight to include tables to further facilitate data warehousing and retrieval, thereby reducing data seek times and processing overhead.

Claims 16-25, 39-41, 39-51, 76-90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knight in view of Lang et al. (USPN 6,314,420) (hereinafter Lang).

19. Referring to claims 16, 17, and 20, Knight discloses the invention substantively as described in claim 13. Knight does not specifically disclose that the computed opinion rating is a positive and a negative sentiment score. In analogous art, Lang discloses another system for processing messages which includes computing a positive and a negative sentiment score (col. 16, lines 10-47). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Lang with Knight in order to make network searches for information entities relevant to user queries to produce significantly improved search results as supported by Lang (col. 2, lines 20-27).

20. Referring to claims 18 and 19, Knight discloses the invention substantively as described in the claims above. Knight does not specifically disclose computing an aggregate positive sentiment score for a set of collected messages. In analogous art, Lang discloses another system for processing messages which includes computing an aggregate positive sentiment score for a set of collected messages wherein it is

computed according to the equation $S_p = \sum_{i=1}^m S_{pm}$ (as applying this formula to the

Art Unit: 2143

example given in Lang, m is the set of articles written by author K , S_{pm} is the rating of each article given by the user A or B , S_p is inherently calculated since all the ratings are added together and then divided by the total number of ratings, $\#$ in sample, to get the average rating) (col. 18, lines 18-56). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Lang with Knight in order to make network searches for information entities relevant to user queries to produce significantly improved search results as supported by Lang (col. 2, lines 20-27).

21. Referring to claims 21 and 22, Knight discloses the invention substantively as described in the claims above. Knight does not specifically disclose computing an aggregate negative sentiment score for a set of collected messages. In analogous art, Lang discloses another system for processing messages which includes computing an aggregate negative sentiment score for a set of collected messages, by computing an IRP negative vector (in the example for four articles, or messages) which can be added (i.e. summed) together to compute the threshold for the author (col. 13, lines 12-34; col. 15, lines 29-67; col. 16, lines 10-32). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Lang with Knight in order to make network searches for information entities relevant to user queries to produce significantly improved search results as supported by Lang (col. 2, lines 20-27).

22. Referring to claim 23-25, Knight discloses the invention substantively as described in claim 16. Knight does not specifically disclose the sentiment score is a net

Art Unit: 2143

sentiment score and is further adapted to compute an aggregate net sentiment score for a set of collected messages. In analogous art, Lang discloses another system for processing messages which includes computing a net sentiment score and is further adapted to compute an aggregate net sentiment score for a set of collected messages (i.e. combining the IRP negative and positive vectors for each article in order to come up with a rating for the article) (col. 13, lines 12-34; col. 15, lines 29-67; col. 16, lines 10-32). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Lang with Knight in order to make network searches for information entities relevant to user queries to produce significantly improved search results as supported by Lang (col. 2, lines 20-27).

23. Referring to claim 39, Knight discloses the invention substantively as described in the claims above. Knight does not specifically disclose the message collector and the message categorizer is adapted to compute an influence score for the extracted pseudonym author. In analogous art, Lang discloses another system for processing messages which includes computing an influence score for the extracted pseudonym author (i.e. rating) (col. 13, lines 12-34; col. 15, lines 29-67; col. 16, lines 10-32). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Lang with Knight in order to make network searches for information entities relevant to user queries to produce significantly improved search results as supported by Lang (col. 2, lines 20-27).

Art Unit: 2143

24. Referring to claim 40, Knight discloses the invention substantively as described in the claims above. Knight does not specifically disclose the influence score is based at least in part on the impact of prior postings by the extracted pseudonym author on other pseudonym authors. In analogous art, Lang discloses another system for processing messages wherein the influence score is based at least in part on the impact of prior postings by the extracted pseudonym author on other pseudonym authors (i.e. the IRP of the author uses the average of ratings given to the author so far, and ratings given to all authors) (col. 15, lines 28-67). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Lang with Knight in order to make network searches for information entities relevant to user queries to produce significantly improved search results as supported by Lang (col. 2, lines 20-27).

25. Referring to claim 41, Knight discloses the invention substantively as described in the claims above. Knight does not specifically disclose computing a reputation score for the extracted pseudonym author. In analogous art, Lang discloses another system for processing messages which computes a reputation score for the extracted pseudonym author (col. 13, lines 12-34; col. 15, lines 29-67; col. 16, lines 10-32). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Lang with Knight in order to make network searches for information entities relevant to user queries to produce significantly improved search results as supported by Lang (col. 2, lines 20-27).

26. Referring to claim 42, Knight-Lang discloses the invention substantively as described in the claims above. Furthermore, Knight-Lang does disclose the reputation score is based on a plurality of influence scores for the extracted pseudonym author under multiple local pseudonyms, however does not disclose that these local pseudonyms have been associated into a universal pseudonym. However it is well known that associating local usernames into a universal username in order for client tracking is well known and expected in the art. By this rationale, it would have been obvious to combine the local pseudonyms under a universal pseudonym in order to fully track the authors throughout different forums, regardless of what names they use, thereby increasing the likelihood that all the related information to an author will be associated with that person, rather than just the username.

27. Claims 43 and 44 are rejected for similar reasons as stated above.

28. Referring to claim 45, Knight discloses the invention substantively as described in the claims above. Knight furthermore discloses that search robots can retrieve content from outside sources such as UseNet or other online message board systems (col. 9, lines 30-35) and recitation of numerous electronic discussion boards such as Yahoo forums, Raging Bull, Motley Fool, and others (col. 1, lines 45-60). Furthermore it is well known that Silicon Investor is a well known electronic discussion forum and would have been known to one of ordinary skill in the art with minimal research. By this

rationale it would have been obvious to one of ordinary skill in the art to modify the electronic discussion forums to comprise the Raging Bull, Motley Fool, Silicon Investor, and Yahoo forums since Knight discloses that other online message board system may be used in the system as disclosed above. This would lead one of ordinary skill in the art to search for other discussion boards and eventually finding the ones recited in the claims.

29. Referring to claim 46, Knight discloses the series of topics includes stocks comprising the S&P 500 (Figure 3B).

30. Referring to claims 47 and 48, Knight discloses the group of topics corresponds to a stock index, and wherein the buzz score is computed by aggregating the buzz scores for the stocks making up the stock index (col. 16, lines 9-38).

31. Referring to claim 49, Knight in view of Lang discloses the invention substantively as described in the claims above. Knight in view of Lang do not specifically disclose the series of topics include a plurality of movies or television shows. However it is well known that discussion forums exist for these genres and would have been obvious to one of ordinary skill in the art to modify the invention of Knight-Lang to include movies and television shows to further expand the customer market, and thereby gain users.

Art Unit: 2143

32. Referring to claim 50, Knight-Lang disclose the invention substantively as described above. Knight-Lang do not specifically disclose comparing the buzz score to a threshold to identify unusual discussion patterns. However it is well known to monitor and keep track of discussion patterns in order to determine what is being said during the posts (i.e. illegal activity, swearing, misuse of the system, etc). By this rationale it would have been obvious to compare the buzz score to a threshold to identify unusual discussion patterns to protect the system and further keep discussions pertaining to legal matters.

33. Claims 51, 76-90 are rejected for similar reasons as stated above.

Conclusion

34. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

35. Duffy et al. (USPN 5,911,043) discloses computer-based rating of information retrieved from a computer network.

36. Fish (USPN 6,035,294) discloses wide access database and database systems.

37. Hazlehurst et al. (USPN 5,974,412) discloses intelligent query system for automatically indexing information in a database and automatically categorizing users.

38. Kirsch (USPN 5,659,732) discloses document retrieval over networks wherein ranking and relevance scores are computed.

Art Unit: 2143

39. Ginn (USPN 6,362,837) discloses simultaneously indicating rating value for the first document and display of second document in response to the selection.

40. Basualdo et al. (WO 00/17824) discloses obtaining and ranking opinions by votes related to various subject matter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph E. Avellino whose telephone number is (571) 272-3905. The examiner can normally be reached on Monday-Friday 7:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JEA
October 13, 2004

William C. Vaughn, Jr.
Primary Examiner
Art Unit 2143
William C. Vaughn, Jr.